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AUTHORISED AUTOWATCH DEALER



CENELEC EN 50436-2



# 720 TAB

## OPERATORS INSTRUCTIONS

## GROUP PROFILE

PFK Electronics was established in 1985 and now employs over 400 people. We are the largest supplier of automotive security products in the South African after-market and export to over 25 other countries. We also have subsidiaries in Australia and the United Kingdom.

Although the focus of PFK's innovation deals specifically with the automotive electronic security after-market, we pride ourselves in producing products for some of the largest motor manufacturers (OEM's) in South Africa and overseas.

Accredited to ISO/TS 16949 and ISO 14001, the highest automotive quality standard warrants that PFK has the systems and procedures in place to produce quality products and to ensure that your vehicles are always protected. Targeting specific export markets, PFK products are certified to comply to major international automotive standards such as C-Tick, VICC, VESA, TUV, TNO and Thatcham to mention a few. All products are manufactured at PFK in Durban at the highly automated state of the art SMD production facility that has enabled PFK to be leaders in automotive vehicle security systems.

## CONGRATULATIONS!

Your vehicle is protected by an AIBBS, Alcohol Immobiliser Breathalyser Blocking System designed to give years of trouble free operation. Made with only the highest quality components and using state of the art technology you can be assured that your vehicle has the best electronic protection against drinking and driving. Ensure that you read this document carefully in order to have a comprehensive understanding by which you can get the full benefit of the functionality of this product.

**Note: A comprehensive Audio/Visual on how to use this system and its functionality is available on DVD.**

### ATTENTION

This Breathalyser immobiliser device needs to be installed in accordance with PFK Electronics installation procedure and in accordance with the national regulations by a qualified installer.

An unqualified installation may invalidate the type approval of the vehicle.

Any attempt to Bypass or Circumvent the system will be recorded in the database of the system.

This includes: Removal of the handset, removal of power, low battery voltage conditions, insufficient sample, circumvention, suck back, door open, ignition ON, ignition OFF, PASS, FAIL, driver change button pushed, Random sample request and Failure to give sample.

**PLEASE NOTE: Low battery condition in a vehicle could potentially cause problems when trying to starting the vehicle.**

### SYSTEM OVERVIEW

The **Autowatch TAB**® provides protection from a vehicle being started and driven by an individual whose blood/alcohol content is higher than a pre-determined level.

**Ensure that comprehensive instructions and demonstration on the functions and use of this system, including blowing techniques is provided by your Service/Installation Centre.**

#### SYSTEM COMPONENTS :

##### ● VEHICLE BLOCKING SYSTEM. (VBS)

This unit, which contains a buzzer and stores all records, is wired into the vehicle's starting circuit. The VBS is not user accessible.

##### ● DRIVER CHANGE/RESET BUTTON WITH LED.

Mounted within convenient reach of driver.

##### ● TEATHERED ALCOHOL BREATHALYSER. (TAB)

#### TAB Button functions

Left button push - Distributors details

Right Button push - Unit details software version number

Both Button 1 and 2 push together - Menu

Power button push – Emergency override

Power button hold 5 seconds – Power down



## DISPOSABLE MOUTHPIECE

The mouthpiece must be fitted into the mouthpiece holder before use of the instrument for breath testing.

Please note that the mouthpiece will only fit into the instrument if orientated correctly.

Unwrap mouthpiece from its protective packaging and, with the guide slot facing left, slide the mouthpiece into the opening of the mouthpiece holder (with instrument display facing you and buttons to the top).

The guide slot must slide over the corresponding guide pin in the holder and the mouthpiece pushed in until it will move no further.

Failure to correctly insert the mouthpiece may result in the instrument refusing to take a breath sample and therefore preventing the vehicle from being started.

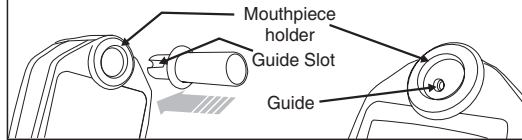
The mouthpieces are disposable, manufactured under hygienic conditions and supplied in individual wrappers.

Please recycle mouthpiece fittings



### IMPORTANT : CORRECT FITTING OF MOUTHPIECE

While inserting the mouthpiece, ensure Guide Slot lines up with the guide on the left side of the mouthpiece holder.



**NB:** We recommend that a new mouthpiece is used for each test.

## BREATH TEST PROCEDURE

### Before providing a sample

1. Your Autowatch TAB® reacts very specifically to the presence of alcohol in the breath. However, it can be affected by, for example, use of mouthwash or the application of perfume and aftershave immediately before taking your sample. All of these products contain alcohol and their presence may affect the results determined by the instrument.
2. Similarly, results can also be affected if you have consumed alcohol up to 20 minutes before providing a sample. This is because your mouth may still contain residual alcohol from the last drink.
3. Smoking within up to two minutes of providing a sample may also produce affected results.
4. Windscreen washers and substances that contain Isopropanol can cause the cabin of the vehicle to be flooded with vapour. This is breathed in then out when you are taking a breath sample. This will cause you to "FAIL" a sample.
- 5) Make sure that the temperature of the mouthpiece is not excessively cold. A cold Mouthpiece will cause a circumvention.

### TAB Power-on

The TAB will turn on automatically when a breath sample is required, alternatively to switch on, press and release the Power Button. A confirming beep will sound, followed by a series of screens showing:

- Autowatch Logo
- Instrument Serial Number & Software Rev.
- PFK website
- Next scheduled service date
- Please Wait

Meanwhile, the TAB automatically checks its operating parameters. When the TAB is ready to take a sample a further single beep will sound, followed by the message:

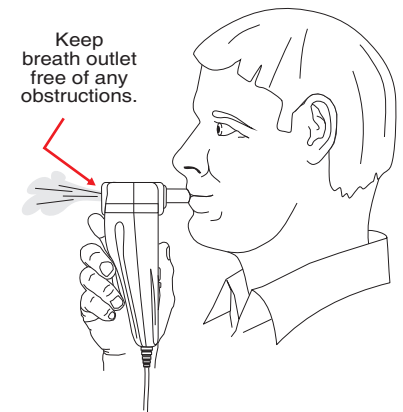
Fit Mouthpiece  
Give Sample

## Providing a breath sample

Take a deep breath, seal your lips around the wide end of the mouthpiece and blow into it with moderate force. The instrument will detect your breath flow and will emit a continuous tone as long as you are blowing correctly. Once sufficient breath has been blown the tone will stop and a click will be heard. The TAB will then analyze your breath sample.

The user needs to blow for at least 3 seconds. This guarantees deep lung air that has diffused from your blood into the air in your lungs, to give a valid alcohol reading.

NB : It is important to ensure that the breath outlet is not blocked in any way while providing a breath sample.



**NOTE :** The TAB is equipped with highly sophisticated methods of detecting sample tampering. Any attempt to start your vehicle without providing an adult human breath sample will be logged within the system and you may be required to explain your actions at a later date.

## OPERATING INSTRUCTIONS

Before starting the vehicle the RED LED on the Driver Change Button will be flashing indicating that the vehicle is blocked by the VBS (Vehicle Blocking System).

It is recommended that the VBS immobiliser is unblocked **prior** to turning on the vehicle ignition.

To achieve this, follow the procedure below:

If the TAB is OFF, switch it ON. When the display shows "**Fit Mouthpiece, Give Sample**" provide a breath sample as described on page 2.

The TAB display will then show "**Analysing**" with a task bar to show progress of sample test.

After a few seconds your breath sample will have been analysed and, if the breath alcohol level is below the pre-set limit, then "**PASS**" will appear on the TAB display and a coded signal will be sent immediately to the VBS in order to unblock the Vehicle Blocking System.

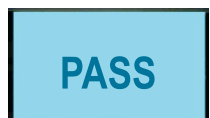
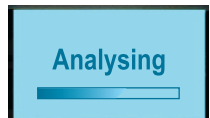
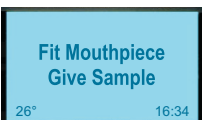
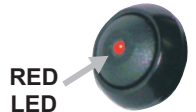
The RED LED will flash rapidly and extinguish confirming that the Blocking System has been unblocked. This status will be recorded by the VBS and the TAB with date and time.

You may now start your vehicle. (\*The specific time period in which you have to start your vehicle is set at a factory default of 5 minutes. This time can be changed by arrangement with your service/fitment centre and can be set to 5, 10, 20 or 30 minutes.)

The TAB will automatically shut down shortly after a valid breath sample is accepted or by pressing and holding the large Power button until the TAB shuts down.

If the ambient temperature is below 25°C the unit will display "Please Wait Unit Heating" with a progress bar. The operational temperature of this unit is -40° C to 85° C

### DRIVER CHANGE BUTTON

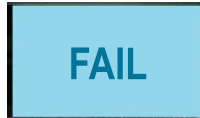


## WARM UP TIMES

+85°C	10 SECONDS	-5°C	< 90 SECONDS
20 °C	< 30 SECONDS	-20°C	< 3 MINUTES

## IF THE VBS FAILS TO UN-BLOCK (Invalid breath sample)

1. If the TAB displays "**FAIL**" then it has detected alcohol in the breath at a level in excess of the preset limit. If you have observed the points shown in the "Before Providing a Sample" section of these instructions, then you have a breath alcohol level above the pre-set limit. The RED LED will flash rapidly, and the Blocking System will remain blocked, the RED LED will continue flashing and the vehicle will not start. This event will be recorded by the VBS with date and time. (If the optional GSM module is connected an SMS message will be automatically sent to a mobile phone or the control centre that a failure as taken place)**The system may also be linked to a fleet management system - ask your service/installation centre.**



You should wait for approximately 30 minutes and then provide a further sample, by which time your body **may** have metabolised the alcohol and reduced the level below the preset limit.

2. If the TAB displays "**Insufficient Sample**" then one or more of the following could be the cause of the problem.

- Insufficient length of blow (Volume).
- Incorrect force of blow (Too hard or too soft).
- If "**Insufficient Sample**" is displayed after providing a breath sample when the tone was heard, it will most likely be an indication of an incorrectly positioned mouthpiece.



## RANDOM "ON THE ROAD" TESTING

Should the "Random Testing" option be selected at installation, while the vehicle is on route, the VBS buzzer will sound as a request for a random breath sample. (This will be randomly repeated at any stage of the journey).

1. The TAB will turn "ON" automatically, when the display shows "Fit Mouthpiece, Give Sample" follow the same procedure to provide a breath sample as described on page 2.
2. The TAB analyses the breath sample as before and the VBS records the result.

Should no breath sample be supplied within a preset period, the buzzer will stop and the RED LED will start to flash at a faster rate continuously until a valid sample is presented.

**NOTE : Failure to provide a breath sample for analysis during random testing or providing a sample that exceeds the predetermined level, will not cause the vehicle to stop, however, failure to provide a breath sample or providing a sample that exceeds the predetermined level will cause a non event to be presented at the GSM output to be sent if the GSM module is connected (Optional). If the vehicle is stopped and the ignition turned off, it will be blocked immediately.**

## DRIVER CHANGING

Should a new driver be required to take over driving responsibilities, the following procedure needs to be followed:

1. As the new driver takes over, the Driver Change Button must be pressed.
2. The VBS buzzer will sound to request a new breath sample.
3. The TAB will turn "ON" automatically, when the display shows "Fit Mouthpiece, Take Sample" follow the same procedure to provide a breath sample as described on page 2.
4. The TAB analyses the breath sample as usual, the VBS records the result and the driver test timer is reset.



Should no breath sample be supplied within a preset time period, the buzzer will stop and the RED LED will start to flash at a faster rate continuously until a valid sample is presented.

**NOTE : Failure to provide a breath sample for analysis during driver changing or providing a sample that exceeds the predetermined level will cause the vehicle to remain blocked, moreover, will result in a non event being presented at the GSM output to be sent if the GSM module is connected (Optional). If the vehicle is stopped and the ignition turned off, it will be blocked immediately.**

## BASIC MAINTENANCE

### Downloading Recorded Results

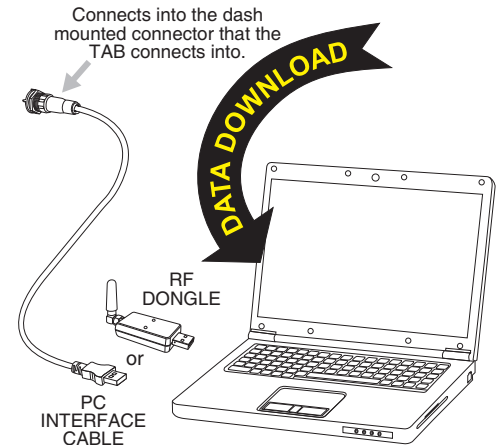
The VBS recorded results can be accessed by using the VBS Download software and A cable direct to a PC or via RF link with a USB RF dongle. This facility will need to be requested from your Service/Installation Centre. The VBS Download software package can be purchased from your service/Installation centre.

### Cleaning the TAB

If and when required, simply wipe over with a lightly dampened cloth.

### Calibration and Services

Calibration and Services need to be arranged with your Service/ Installation Centre.



**NOTE : Please do not use chemical solvents, abrasives or excess water as these could damage the case material, and possibly the internal sensors.**

**IMPORTANT : It must be understood by all users that the TAB is a highly sophisticated and delicate unit.**

## QUICK TROUBLE SHOOTING GUIDE

### Unit displaying "Circumvention" after a breath sample

- Remove mouthpiece and warm it with your hand. Retry.
- If the problem persists please contact you nearest service centre.

### Unit display "Processing Sample" then "Circumvention" or "Suck Back"

- Turn unit off by holding down the power button for more than 5 seconds.
- Then turn on the unit wait for it to come ready and display "Fit mouthpiece Give sample".
- If the problem persists please contact you nearest service centre.

**No communication between the TAB (handset) and the VBS (vehicle unit).There should be a beep from the VBS every time there is communication between the TAB and the VBS.**

- Disconnect the TAB cable from the 4-way panel mount connector. Re-connect the TAB cable to the 4 way panel mount connector.
- The TAB should display "Synchronisation Successful".
- If not there could be a problem with TAB, VBS or connection please contact you nearest service centre.

## ALCOLOCKS DO'S AND DON'TS

### DO'S

- DO.... Press all Function Switches gently and treat system with respect.
- DO.... Use the correct mouthpieces, refer to user guide
- DO.... Use a clean and hygienically wrapped new mouthpiece for every new user.
- DO.... Ensure user blows through the lipped end of the mouthpiece.
- DO.... Ensure the system is calibrated periodically as per manufacturer's recommendation.
- DO.... Read this handbook and comply with all instructions contained herein.
- DO... Have the system regularly checked
- DO.... Have your system serviced and calibrated by a qualified and approved Alcolock service provider

#### IMPORTANT - ALTITUDE

WARNING for altitudes greater than 2500 m the unit is more sensitive to ethanol, and an attempt to give a breath sample could result in a FAIL even when the BrAC is lower than the alcohol set point of the unit.

The VBS will then block the vehicle from starting and the vehicle will not start.

### DON'TS

- DO NOT.... Perform a breath test if you have been either drinking in the last twenty minutes, or smoking in the last two minutes.
- DO NOT.... Clean the case with chemical or abrasive products, since these could cause permanent damage.
- DO NOT.... Allow the sampling port to become blocked.
- DO NOT.... Block or restrict the mouthpiece outlet for example with your finger when providing a breath sample. This may cause serious damage.
- DO NOT.... Consume alcohol and immediately blow into the system.
- DO NOT.... Eat any food and immediately blow into the system.
- DO NOT.... Blow smoke into the unit.
- DO NOT.... Drink cold or hot water and then immediately blow into the system.
- DO NOT.... Use mouth fresheners or similar type products which are alcohol based prior to providing a breath sample.
- DO NOT.... Open the instrument or attempt any repairs, as this invalidates the systems warranty.
- DO NOT.... Leave the mouthpiece in the in the unit when leaving the vehicle stationed for long periods.
- DO NOT... Deviate from the operators instructions.

#### IMPORTANT - EXCESSIVE ALCOHOL

Please note that in the case where excessive alcohol has been consumed, if a breath sample is presented to the system, the device may take some time to recover from the excessive alcohol presented to the sensor.

### WEEE Directive

Do not throw away or dispose of in landfill site.  
Return to local distributor or manufacturer.



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## Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:**

- 1) this device may not cause **harmful** interference and
- 2) this device must accept any interference **received**, including interference that may cause undesired operation of the device.

#### FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.